Report of the Swordfish/Shark Species Working Group

Advisory Committee to the U.S. Section to ICCAT
2021 Species Working Group Meeting

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The Swordfish/Shark Species Working Group met virtually on May 18, 2021, to develop recommendations regarding ICCAT's conservation, management, research, and data collection efforts for swordfish and sharks. The Working Group reviewed its 2020 report and considered the results of the 2020 ICCAT correspondence process and recent work of ICCAT's Standing Committee on Research and Statistics (SCRS).

Recommendations
The Swordfish and Sharks Species Working Group makes the following recommendations for the Advisory Committee's consideration:

Swordfish – Conservation and Management Recommendations

1. Beginning with the 2021 Panel 4 meeting, the United States should support further development of the conceptual management objectives for North Atlantic swordfish agreed to at the 2019 annual meeting (Res. 19-14) by adding precautionary probabilities as well as timelines. An objective should be added to guide rebuilding should the SCRS determine that the stock is overfished and to manage juvenile mortality to ensure productivity.
2. The United States should continue to support the development of a management procedure based on management strategy evaluation (MSE), aiming for adoption in 2022, to replace Rec. 17-02.
3. If requested, the United States should only consider temporary quota transfers with conditions requiring other countries to use the same best fishing practices mandated in this country (e.g., bycatch mitigation measures).
4. The United States should further investigate compliance with minimum size requirements for this stock.

Swordfish – Research and Data Collection Recommendations

1. NMFS scientists should continue to be active in the development of MSE for North Atlantic swordfish, with an aim to present results to the Commission in 2021. As part of this effort, the SEFSC should consider proposing candidate management procedures designed to achieve the initial operational management objectives.
2. The United States should continue to promote improved data collection for swordfish by all CPCs, including from recreational fisheries. Particular focus should be given to catch at size, including live and dead discards, in addition to total catch, in support of management recommendation (4) above.
3. The United States urges ICCAT to initiate studies that compare the effect of hook type and other terminal gear modifications on at-haulback and post-release mortality.
4. The United States should further research the effects of the implementation of minimum size requirements, especially for the North Atlantic stock.

5. Pursuant to Recommendation 19-05, the WG recommends that electronic tags continue to be deployed on swordfish in order to collect important data (e.g., habitat utilization, movement ecology and post-release mortality) to be incorporated into habitat and assessment models.

Sharks – Conservation and Management Recommendations

1. The United States should prioritize in 2021 science-based safeguards for North Atlantic shortfin mako sharks that reduce mortality below levels recommended by the SCRS.
2. The United States should support a proposal to establish a science-based ICCAT limit for South Atlantic shortfin mako sharks, if offered.
3. The United States should prioritize Compliance Committee deliberations with regard to sharks, taking into consideration the reports submitted by Contracting Parties under Recommendation 18-06, with a view to:
    a. improve clarity and eliminate ambiguity in CPCs' annual reports;
    b. evaluate compliance with data reporting obligations for sharks and seek appropriate action, such as application of Rec. 11-15, *Recommendation by ICCAT on Penalties Applicable in the Case of non-Fulfillment of Reporting Obligations*, Rec.06-13, *Recommendation by ICCAT Concerning Trade Measures*, or other ICCAT instruments to address issues of non-compliance;
    c. collaborate with other CPCs to take action to address broader concerns with the inaccurate reporting of dead discards of sharks and other species, including by pursuing definitions of dead discard and clearly defining ICCAT TAC to include dead discards for all CPCs;
    d. work to ensure full implementation of existing recommendations by all CPCs, particularly with respect to Rec. 19-06, *Recommendation by ICCAT on the conservation of North Atlantic shortfin mako,* and the catch data needed to evaluate its effect; this should be pursued via bilateral negotiations with the primary shortfin mako fishing CPCs (the European Union, Japan, Morocco, and Canada).
4. The United States should continue to pursue an ICCAT recommendation to require that all retained sharks be landed with their fins naturally attached. These efforts should occur well in advance of the Commission annual meeting and specifically appeal to the EU and Canada for assistance in adding co-sponsors to the proposal.

Sharks – Research and Data Collection Recommendations

1. For those shark species lacking an assessment, the SCRS should continue efforts to explore data-limited methods to assess stock status, including indicators in trends of relative abundance.
2. NOAA should continue supporting research on bycatch avoidance and post-release mortality with a focus on species for which retention is prohibited by ICCAT (to help evaluate the efficacy of existing management measures). Particularly, the United States should examine the effects of the use of J hooks and circle hooks (e.g. internal hooking), terminal gear configuration (e.g. nylon vs. wire), and fishing practices (e.g. soak time) on post-release mortality in both commercial and recreational fisheries. NOAA should also support research into the effect of spatiotemporal variables on the habitat use of species captured in ICCAT fisheries to inform management measures and advance bycatch mitigation efforts.
3. The United States should support research towards the development and adoption of a management procedure, with the associated limit, target, and threshold reference points, for North and South Atlantic blue sharks.

4. The United States should continue to promote improved data collection for sharks by all CPCs, including from recreational fisheries. Particular focus should be given to data-deficient pelagic species (e.g., common thresher sharks) which are frequently taken in ICCAT fisheries.
5. The WG recommends that electronic tags continue to be deployed on sharks in order to collect important data (e.g., habitat utilization, movement ecology and post-release mortality) to be incorporated into habitat and assessment models.

Working Group Members:
David Kerstetter (Convener)
Sonja Fordham
Dewey Hemilright
Jason Schratweiser
Rick Weber
Kesley Banks
Jeff Kneebone
William McIntyre (Absent)
Katie Westfall

Other Attendees:
Bryan Keller (Rapporteur)
Andrea Kroetz
Carrie Soltanoff
Craig Brown
Dean Courtney
Xinsheng Zhang
Derek Kraft
Enric Cortes
Gerry Leape
Greg Skomal
John Graves
John Carlson
Karyl Brewster-Geisz
Kim Blakenbeker
Michael Schirripa
Rachel O'Malley
Randy Blankinship

Commissioners:
Alexa Cole
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